

EXHIBIT H

UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

In Re Adams Golf, Inc.
Securities Litigation

)
)
) Consolidated
) C.A. No. 99-371 KAJ
)
)

EXPERT REPORT OF CHRISTOPHER M. JAMES

I. Qualifications and Assignment

1. I am the William H. Dial/SunBank Eminent Scholar and Professor of Finance at the University of Florida. Before joining the faculty of the University of Florida, I taught at the University of Oregon and the University of Michigan. I have also held positions at several Federal Reserve Banks, the Federal Deposit Insurance Corporation, and the Treasury Department. I currently serve on the Advisory Board of SunTrust Bank. My academic research has been in the areas of securities pricing, corporate finance, and financial institutions. I have published numerous articles on the relationship between securities prices and financial and accounting information. I also serve on the editorial boards of four scholarly journals including the *Journal of Financial Economics*. I served as an associate editor of the *Journal of Finance* and as editor of the *Journal of Financial Intermediation* from 1988 through 1999. A copy of my curriculum vitae is attached as Exhibit 1. A list of my deposition and trial testimony over the past

four years is included in Exhibit 2. I am being compensated for my time and services on an hourly basis. I am charging my regular hourly rate of \$650.

2. I have been retained as an expert witness on behalf defendants to examine what part, if any, of Plaintiffs' losses during the class period were caused by public disclosures that corrected prior alleged misleading statements or omissions by Defendants, including those in the initial public offering (IPO) Prospectus and Registration Statement (collectively "Prospectus") for Adams Golf on July 10, 1998. Specifically, I understand that, among other things, Plaintiffs assert claims under Sections 11 and 12(a)(2) of the Securities Act of 1933. Plaintiffs allege that defendants did not mention in their offering Prospectus associated with the IPO the existence or risk of a gray market in which Adams Golf products were being sold by discounters. In addition, Plaintiffs allege defendants did not disclose certain sales practices regarding "double shipping" and liberal return policies. Plaintiffs allege that as a result of these misrepresentations and omissions the offering price in the IPO was higher than it otherwise would have been.
3. The Complaint in this matter is unclear on the dates of proposed curative disclosures associated with these alleged material misrepresentations and omissions. Since the class period ends on October 22, 1998, I assume that any curative disclosures occurred on or before October 22, 1998.
4. As part of my analysis, I have reviewed court filings, SEC filings, analyst reports, deposition transcripts, news stories, academic articles, industry sales data and securities data. The opinions presented in this report are a result of the information available to me as of the report date, and I retain the right to

supplement or modify my opinions if new information comes to light. Similarly, I retain the right to supplement or modify my opinions if new allegations, or new curative days, are proposed. I also retain the right to respond to any report(s) or opinions offered by experts for the Plaintiffs.

5. A complete list of the materials I considered is contained in Exhibit 3.

II. Summary of Opinions

6. My review of the evidence leads to the following conclusions:

Alleged Gray Marketing

- a) The underwriters knew about the existence of and risks associated with a gray market in Adam Golf's products before the IPO on July 10, 1998. In a June 9, 1998 press release, Adams Golf disclosed the existence of a gray market in connection with sales of golf clubs at Costco. Furthermore, at the time of Adams Golf's IPO, it was widely known that gray marketing was occurring in the industry. Accordingly, at the time that the \$16.00 per share IPO stock price was established, the underwriters knew of the gray market.
- b) Market participants also knew of the risk of the gray market due to the prior disclosure. As a result, the existence and risk associated with gray market sales were reflected in the price of Adam Golf's stock when it began trading in the secondary market on July 10, 1998. Since the closing price on July 10, 1998 was \$18.375, which is above the offer price of

\$16.00, there is no evidence of any loss arising from the alleged omissions or misrepresentation of this information in the offering material.

- c) Post-IPO disclosures regarding the gray market did not result in statistically significant price movement and therefore this alleged omission was previously known to the market or not material. During the class period there were three days in which gray market problems were discussed in news or in analyst reports. The first was a *Golf Pro* article published on Saturday, August 1, 1998. On the Monday following the *Golf Pro* article, there was no statistically significant price reaction. The second discussion was a Lehman Brothers analyst report published on August 28, 1998. On this day and the next day, there were no statistically significant stock price reactions. The lack of a significant stock price reaction on these dates is consistent with this information being either (a) not material or (b) previously known to market participants before the IPO. The lack of a significant price reaction on these dates together with the announcement of gray marketing before the IPO imply that there is no evidence that a discussion of gray marketing risk in the Prospectus would have had an impact in the pricing of Adams Golf's IPO. In my opinion there are no damages associated with these alleged misrepresentations and omissions.
- d) The only disclosure related to the gray market that is associated with a statistically significant negative decline was the October 22, 1998 press release, which was made after the close of trading. The price decline on

October 23, 1998 was statistically significant, but was due to other information released. In the October 22, 1998 press release, Adams Golf announced operating results for the third quarter of 1998. As part of its press release Adams Golf announced that it expected fourth quarter sales to be affected by weakness in the golf equipment market; it anticipated sales to be impacted by "the recent gray market distribution" of its products; and it anticipated net income for the fourth quarter to be at or slightly above a break even level. In addition, analysts revised their fourth quarter consensus earnings estimates on October 23, 1998 from \$0.11 per share to \$0.05 per share. On October 23, 1998 the price of Adams Golf's stock price fell 16.2% or \$0.75. Given that (a) the market was aware of the gray market problem before October 22, 1998; (b) the announcement contained new information regarding market conditions and future performance; and (c) analysts revised their consensus earnings estimates, the price decline on October 23, 1998 was not in my opinion due to a disclosure of the risk of gray market sales in Adams Golf's products.

Alleged Questionable Sales Practices

- e) There was no disclosure related to the alleged questionable sales practices during the class period, so by definition, Adams Golf's stock price decline was caused by something other than the alleged omissions or misrepresentations.

Other Reasons for the Decline

- f) The decline in Adams Golf's stock price was caused by factors other than the alleged misrepresentations and omissions. During the class period Adams Golf's stock price declined due to an industry wide decline in demand and new competitive products in Adam Golf's segment of the market.
- g) To evaluate the cause of the stock price decline, I conducted an analysis of the Adams Golf's stock price performance on each day during the class period. Apart from October 23, 1998, there are no days with negative and statistically significant stock returns. There were no disclosures on these dates regarding sales practices or gray marketing. Thus there is no evidence of a curative disclosure pertaining to the allegations in the complaint leading to a significant decline in Adam Golf's stock price during the class period.

III. Background

- 7. Adams designs, manufactures and markets premium quality, technologically innovative golf clubs. The Tight Lies fairway wood was introduced in 1995 to address the average golfer's inability to get the necessary ball-flight trajectory to maximize distance with a long iron or oversized fairway wood. At the time of Adams Golf's IPO, the complete Tight Lies line of products included the original, Strong 3, Strong 5, Strong 7 and Strong 9 fairway woods.¹

¹ Adams Golf Inc. Prospectus filed 7/13/98.

8. According to the Golf Market Research Institute, the Tight Lies fairway woods were the top-selling single fairway woods in the U.S. on a unit volume basis during the three months ended March 31, 1998. During this period, the company achieved a 27% market share of the single fairway woods category.²
9. Before and throughout the class period, Adams utilized a marketing model integrating direct response and traditional image-based advertising to generate brand awareness and drive retail sales. The company's advertising included a 30-minute infomercial and print advertising in publications such as Golf Digest, USA Today and The Wall Street Journal. Adams Golf also established a relationship with internationally recognized, professional golfer Nick Faldo, whose use of the Tight Lies fairway woods increased brand exposure.³
10. The success of the Tight Lies fairway woods and Adams Golf's unique marketing approach led to the company's IPO on July 10, 1998. The company sold 6,900,000 shares to the underwriters in a firm commitment underwriting at a price of \$16.00.⁴ The underwriters in turn sold the shares to the public at the \$16.00 offer price. On the first day of trading the stock price rose to a closing price of \$18.375.
11. As noted in the company's Prospectus, the golf club industry is highly competitive. Adams Golf's competitors include a number of established companies, many of which have greater financial and other resources than does Adams Golf. Major competitors include Callaway Golf Company, Orlimar,

² Adams Golf Inc. Prospectus filed 7/13/98.

³ Adams Golf Inc. Prospectus filed 7/13/98.

⁴ 6,000,000 shares were sold in the offering, and 900,000 shares were sold in the over-allotment, per Adams Golf Inc. Prospectus filed 7/13/98 and email from underwriters dated 11/14/05.

Adidas-Salomon AG (Taylor Made), Fortune Brands, Inc. (Titleist and Cobra), Top-Flite, Ping and Mizuno. The golf club industry is generally characterized by rapid and widespread imitation of popular technologies, designs and product concepts. In fact, Orlimar Golf introduced a premium fairway wood in January 1998 and positioned its Tri-Metal fairway wood as an advance in technology rather than an advance in design. Orlimar also mimicked Adams Golf's marketing model.^{5,6}

12. In 1997, wholesale sales of golf equipment in the U.S. reached an estimated \$2.4 billion. Wholesale sales of golf clubs increased at an estimated compound annual growth rate of approximately 13% over the 5-year period from 1992 to 1997. At the time of the IPO, the company believed that a number of trends were likely to further increase demand for Adams Golf's products. These trends included: (i) significant growth in the number of golf courses; (ii) increasing interest in golf from women, junior and minority golfers; (iii) the large numbers of golfers entering their 40s and 50s, the age when most golfers begin to play more often and increase their spending on the sport; (iv) the correspondingly large population of "Echo Boomers," who are beginning to enter their 20s, the age when golfers generally take up the sport; and (v) the rapid evolution of golf club designs and materials.⁷

⁵ Adams Golf Inc. Prospectus filed 7/13/98.

⁶ "Adams Golf Inc.: Fore! A Golf Equipment Giant is Headed Your Way," Lehman Brothers, 8/28/98.

⁷ Adams Golf Inc. Prospectus filed 7/13/98.

IV. Methodology

13. Counsel has advised me that the statutory measure of damages for a Section 11 claim generally is the difference between the amount paid for the securities and (1) their value at the time of suit; (2) the price at which the plaintiffs sold the securities before suit; or (3) the price at which plaintiffs sold post-suit but pre-judgment if those damages are less than (1). Assuming that plaintiffs never sold, damages cannot exceed the difference between the price paid and the price on the date of the first security-specific complaint in this matter.
14. I understand that a defendant may limit liability under Section 11 and 12(a)(2) if it can show that the decline in value of the security cannot be attributed to the alleged misstatements or omissions in the Prospectus, but instead resulted from other factors. In my opinion, the economically correct way to approach this question is first to examine whether information regarding the allegations in the complaint was disclosed to the market before the offering. If there were disclosures before the offering and if there is no significant price decline when Adams Golf's stock began trading, then there is no economic evidence of any loss arising from the alleged omissions or misrepresentations in the Prospectus.
15. The second step in my analysis is to determine whether the market for Adams Golf's common stock was an efficient market. In an efficient market all publicly available information regarding the company and its business is fully and rapidly incorporated in the stock price.
16. The third step in my analysis is to investigate whether, after Adams Golf's stock began trading, there were any stock price declines associated with allegedly

curative disclosures, and then to test those declines to determine if they can be causally linked to the information released. Any price decline that occurs in absence of a curative disclosure, or that cannot be causally linked to a curative disclosure, should be excluded from damages because such a decline is not related to the issues in this litigation.⁸

17. The methodology I use to analyze the changes in Adam Golf's stock price is an event study. The event study methodology is widely-employed in academic research on the behavior of security prices.⁹ The price of a security (such as common stock) in an efficient market, reflects the total mix of information available in the marketplace about the company's future earnings prospects and only *new* material information about a company's earnings prospects changes security prices.
18. Security prices respond to a variety of information which is *not* specific to the firm but nonetheless affects the value of future earnings, including information about the broad economy and information about the particular industry in which the firm operates. The goal of an event study analysis is to remove such broad economic and industry effects from daily price movements and develop a model to quantify the "normal" level of firm-specific price movements.
19. The first step in event study analysis is deriving a relationship that explains security price movements based on broad economic and industry-specific factors. Once this relationship is modeled, a researcher can isolate the portion of daily

⁸ Finance theory implies that any price decline subsequent to a full curative disclosure cannot be attributable to the alleged misrepresentations and omissions in the registration statement.

⁹ See, for example, Campbell, John, Andrew W. Lo and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

security price movements that is firm-specific. Statistical tests can be applied to these daily firm-specific price movements to determine which are abnormal, or "statistically significant."

20. Statistically significant movements typically indicate that new, material firm-specific information about the firm's future earnings prospects reached the market that trading day. The relatively smaller movements on other days are typically the result of normal, volatile trading activity and do not represent the pricing-effects of material firm-specific information; such small movements are not statistically distinguishable from zero firm-specific movement.
21. No damages should result from firm-specific price movements that are not statistically significant. This is because such normal movements cannot be causally tied to *any* firm-specific information, let alone to potentially curative disclosures relating to this litigation. These movements are typically a result of general market and industry trends or normal, volatile trading behavior.
22. To determine what factors are moving security prices over the relevant time periods, I performed an event study and analyzed each day where there was a statistically significant share price movement. Only the days where new firm-specific information was released that relates to Plaintiffs' allegations can be claimed by Plaintiffs as days on which they suffered any damage. The movements on other significant days are the result of firm-specific news (negative or positive) that is unrelated to this litigation and for which no damages can result.
23. Furthermore, market efficiency implies that once a curative disclosure is made, no future price changes after the immediate reaction can be attributed to Plaintiffs'

allegations. Thus, any price declines after the first curative disclosure can not be claimed as losses caused by Plaintiff's allegations.

24. Finally, I explored other potential factors influencing Adams Golf's stock price during this time period. These other factors included general industry conditions and, more specifically, Adams Golf's relative market share.

V. Pricing the IPO and Secondary Market Prices Immediately After the IPO

25. To determine whether losses resulted from the alleged omissions of the existence of the gray market from the Prospectus, I examined the effect of curative disclosures on Adams Golf's stock price. Curative disclosures are those that first eliminate the alleged misrepresented information from or add the alleged omitted information to the total mix of information available to the market. Damages would result from any loss attributable to the first disclosure regarding gray marketing, assuming such information was material. As I show below, no losses resulted from this curative disclosure because it occurred before the IPO, so the information was either incorporated in the offer price or otherwise not material.
26. Adams Golf first disclosed the existence of the gray marketing on June 9, 1998, before the IPO. The company issued a press release announcing it had filed a Bill of Discovery against Costco:

The Bill of Discovery was filed in order to determine whether Costco's claims that they had properly acquired Adams' Tight Lies ® fairway woods for resale were accurate. Adams Golf became concerned when it

learned that Costco was selling their Tight Lies® fairway woods because Costco is not an authorized distributor.¹⁰

27. Furthermore, it was widely known that gray marketing was taking place throughout the industry. Callaway, one of Adams Golf's industry peers, discussed gray marketing in its 1997 10K:

Some quantities of the Company's products find their way to unapproved outlets or distribution channels. This "gray market" in the Company's products can undermine authorized retailers and distributors who promote and support the Company's products, and can injure the Company's image in the minds of its customers and consumers. On the other hand, stopping such commerce could result in a potential decrease in sales to those customers who are selling Callaway Golf products to unauthorized distributors and/or an increase in sales returns over historical levels. While the Company has taken some lawful steps to limit commerce in its products in the "gray market" in both domestic and international markets, it has not stopped such commerce. The Company's efforts to address gray market issues could have an adverse impact on the Company's sales and financial performance.¹¹

28. Titleist, a brand owned by Fortune Brands, another golf club industry peer, also disclosed information about its gray marketing issues in a May 18, 1998 press release:

In an effort to protect the image of the Titleist brand and the goodwill of its golf shop focused sales distribution strategy, Titleist announces it has taken action against accounts in violation of the Titleist Transshipment/Redistribution Policy.

...

Titleist implemented a Transshipment/Redistribution Policy several years ago, whereby, it is a violation for a Titleist direct account to engage in the wholesale of Titleist products or any sale that results in those Titleist products being discovered for resale in a non-authorized retail location. ... In the last four weeks Titleist has discovered the resale of Titleist products in several non-authorized retail locations within the U.S. and Japan.¹²

¹⁰ "Adams Takes Legal Action Against Costco," PR Newswire, 6/9/98, 5:02 PM.

¹¹ Callaway Golf Company 1997 10K filed 3/31/98.

¹² "Titleist Announces Enforcement of Transshipment Policy," Archive.org, 5/18/98.

29. Given these disclosures and Adams Golf underwriters' deposition testimony, it is clear that the underwriters knew of the gray market issue faced by Adams Golf, as well as its industry peers, before Adams Golf's IPO, and considered it as one of many factors in their due diligence process.¹³ Given that the underwriters were aware of the gray market as part of the total mix of information at the time that the offering price was determined (based upon supply and demand forces during the pre-IPO process), no damages could result from the alleged omissions or misrepresentations of the gray marketing from the Prospectus.
30. Moreover, had the underwriters *not* known about the gray marketing or failed to incorporate this information into the offer price, thereby arguably overpricing the offering, the market would have responded to the June 9, 1998 press release as shares began trading in the secondary market on July 10, 1998. If a loss had occurred on the first day of trading, it could potentially be attributed to the curative disclosure on June 9 and result in damages. However, Adams Golf's stock price rose \$2.375 from \$16.00 to close at \$18.375 on the first day of trading. Since the stock price did not decline on July 10, 1998, I conclude that the information provided by the first disclosure of gray marketing was either already embedded in the offer price or otherwise not material. Thus no damages resulted from the alleged omissions or misrepresentations of the gray marketing from the Prospectus.

¹³ The letter from Joseph A. Hoffman to the SEC, dated July 6, 1998, states that the underwriters' counsel and the Company's counsel had reviewed the publicity leading up to and after the filing of the Registration Statement and believed that the Prospectus adequately addressed this Company publicity.

VI. Evaluation of Market Efficiency of Adams Golf's Stock

31. Given my training, research and experience over the past 20 years I have formed the opinion that the market for Adams Golf's stock was efficient. An examination of various indicia of the market for Adams Golf's stock shows that it was sufficiently active and developed throughout the class period to allow an assumption of efficiency.
32. This section discusses the economic concepts of market efficiency, including the definition of and economic conditions that result in market efficiency; the application of these economic concepts to the fraud-on-the-market theory; and an analysis of the market for Adams Golf's stock.

(i) Economic Concepts of Market Efficiency

Definition of Market Efficiency

33. A market for a particular security is said to be efficient, in this context, if the security's price fully and rapidly incorporates all publicly available information regarding the company and its business (see, e.g., a standard finance text, *Principles of Corporate Finance* by Brealey and Myers, 7th Ed., p. 351).
34. The speed of the reaction to new information is very rapid in an efficient market. As discussed in Brealey and Myers, "prices will adjust immediately to public information" in an efficient market.¹⁴ Brealey and Myers cite a study by Patell

¹⁴ Brealey and Myers, 7th Ed., p. 351.

and Wolfson of the market's reaction to the public announcement of companies' earnings and dividends, which shows that "the major part of the adjustment in price occurs within 5 to 10 minutes of the announcement."¹⁵

Economic Conditions Resulting in Market Efficiency

35. Efficient markets arise when there is a sufficiently large number of competing investors, particularly market professionals such as institutional investors, so that any new information concerning a stock is reviewed immediately, assessed for its implications for stock price, and fully impounded in the price through active trading by different investors.
36. A *developed market* is one in which there is sufficient trading volume and interest by active market participants who monitor the stock that any relevant information released to the public will be traded on and reflected in the stock price in a rapid fashion. The resulting market for the stock is *efficient* if the stock price responds rapidly to new information. An implication is that, in an efficient market, stock price changes will result from new information concerning the company and its business, rather than in an arbitrary manner without reference to new information that should affect the stock's value.
37. Thus, once new information (or unexpected news) about the company and its business enters the public domain, this information remains part of the total mix of information and is already impounded in the stock price until new information arrives. If the market for Adams Golf's stock was efficient, any disclosures about

¹⁵ Brealey and Myers, 7th Ed., p. 353, citing Patell and Wolfson, 1984, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements," *Journal of Financial Economics* 13, 223-252.

gray marketing would be impounded in the stock price when this information entered the public domain. It would then remain incorporated in the stock price until any new information materially changed the total mix of information, causing a statistically significant change in Adams Golf's stock price.

(ii) Application of Concepts of Economic Efficiency to the Fraud-on-the-Market Theory

38. In a discussion of the fraud-on-the-market theory, Bagley¹⁶ notes (p. 596) that the "efficient-market theory is based on assumptions about how market professionals do their jobs and what investors rely on when they invest." She continues (pp. 596-597):

The courts have identified at least five factors to consider in identifying an efficient market: (1) sufficient weekly trading volume, (2) sufficient reports and analyses by investment professionals, (3) the presence of market makers and arbitrageurs, (4) the existence of issuers eligible to file form S-3 short-form registration statements, and (5) an historical showing of immediate price response to unexpected events or financial releases. In addition, for a market to be open and developed, it must have a large number of buyers and sellers, and a relatively high level of trading activity and frequency. It must also be a market which rapidly reflects new information in price.

39. An analysis of these criteria shows that they correspond to the economic concepts of market efficiency and the underlying economic mechanism that results in market efficiency. For example, of the "five factors" identified by Bagley, the first four are indicative for economic conditions of a developed market that supports market efficiency, while the fifth factor is a definition of market efficiency (and hence provides the ultimate test of efficiency). These factors were

¹⁶ C.E. Bagley, 1991, *Managers and the Legal Environment: Strategies for the 21st Century*, West Publishing Company.

articulated by the court in *Cammer v. Bloom*, 711 F. Supp. 1264, 1286 (D.N.J. 1989) as "several types of facts which, if alleged, might give rise to an inference that [the stock] traded in an efficient market."

40. *Cammer* suggests that the stock price reaction to new information is the most important factor of the above considerations, which is consistent with modern financial economics theory. New information arrives to the public domain in several ways, including a company's press releases, public media coverage, and coverage by securities analysts.¹⁷ The speed of the stock price's response to material new information is essential to the determination of market efficiency for a stock. Hence, a rapid, statistically significant reaction of a stock price to material new information is indicative that the market for a stock is efficient.

(iii) Adams Golf's Stock Traded in a Developed and Efficient Market

41. The Nasdaq market on which Adams Golf traded was open to professional traders who could trade on new information not yet impounded in the price. There is demonstrable evidence that the market for Adams Golf's stock was sufficiently active and well developed to support a presumption of market efficiency throughout the class period, and was evidently efficient. That evidence is discussed below using the guidelines in *Cammer*.

The Market for Adams Golf's Stock Was Developed

¹⁷ Any information should be examined objectively in order to determine whether it has a significant impact on stock prices in a systematic and scientific way.

42. This section examines the first four factors cited by *Cammer*. This analysis demonstrates that the market for Adams Golf was developed throughout the class period.

Weekly Trading Volume

43. During the class period, Adams Golf's stock was widely held and traded frequently, and did not have any non-trading days. There were approximately 22,479,000 shares outstanding as of December 31, 1998 (the same number of outstanding shares as of September 30, 1998). There were approximately 7,000 shareholders according to Adams Golf's 1998 10K. Lastly, there were 24 and 16 institutional investors holding 2,368,415 and 1,024,006 shares of Adams Golf as of September 30, 1998 and December 31, 1998, respectively.¹⁸ I found that during the class period there were 16 trading weeks with an average weekly reported trading volume of 1,985,278 shares, which was 8.8% of the outstanding shares. In the *Cammer* decision, a 2% average trading volume was set as the benchmark for sufficient average trading volume.

Analysis by Investment Professionals

44. According to various public information sources,¹⁹ Adams Golf was followed by six analysts: Lehman Brothers, NationsBanc Montgomery Securities, Ferris Baker Watts, Renaissance Capital Corp., Midtown Research Group and IPO Value Monitor.

Market Makers

¹⁸ Bloomberg, SEC filings, CRSP.

¹⁹ Nelson's Directory of Investment Research, Volume II - U.S. Companies for 1999; Factiva.

45. According to the Center for Research in Security Prices (CRSP) the average number of market makers for Adams Golf's stock on the Nasdaq during the class period was 18, with a maximum of 21 market makers and a minimum of 16 market makers.

S-3 Registration

46. Only companies who have been publicly traded for at least a year from their initial public offering date can file S-3 registration statement (a short-form registration statement) with the SEC. Adams Golf was not eligible for S-3 registration during the class period, because it did not meet this time period requirement. Thus, it is not surprising that Adams Golf was not eligible to file an S-3 registration statement.
47. General financial economics theory would not give any consideration to this factor in a discussion about market efficiency. The S-3 registration statement itself has no impact on the fundamental issue of market efficiency, which is whether the security's price fully and rapidly incorporates all publicly available information regarding the company and its business.

The Market for Adams Golf's Stock Was Efficient

48. This section examines the fifth factor cited by *Cammer* in addition to the indicia of market development. The critical test to establish whether the market for Adams Golf's stock was efficient is an historical examination of immediate price response to unexpected events or financial releases. The analysis of Adams Golf's stock price reaction to new and material information demonstrates that the

stock rapidly incorporated new information about the company and its business.

Thus, the market for Adams Golf was efficient throughout the class period.

49. A rapid, statistically significant reaction of a stock price to new material information is indicative that the market for a stock is efficient. To determine whether new material information or events significantly changed the total mix of information, I use standard statistical analysis, i.e., an event study analysis.
50. As discussed in the Methodology section above, the movement in Adams Golf's common stock on most days during this period can be explained largely by broad market factors and normal trading behavior. To analyze what firm-specific information influenced the stock price over this time period, I performed an event study and researched what new information was released on each statistically significant day.²⁰
51. For the purposes of event study analysis, I modeled Adams Golf's daily stock returns as a function of the Nasdaq index. I estimated my regression over the period of July 10, 1998 to October 22, 1998. As shown in Exhibit 4, the Nasdaq index changes explained 17.6% of the daily stock returns of Adams Golf.²¹

²⁰ I examined the days where the residual stock price returns were statistically significant at the 95% level. A 95% confidence interval is the standard level used in event studies.

²¹ I also examined other models to explain Adams Golf's daily stock returns. I first modeled Adams Golf's daily stock return as a function of a modified Bloomberg Golf Index, and then I modeled Adams Golf's daily stock return as a function of (1) a modified Bloomberg Golf Index, and (2) the Nasdaq index. The first model can explain only 12.9% of the variation of Adams Golf's daily stock return. Including both indices in the second model does not improve (statistically) the fit of the model (in fact, the industry index becomes insignificant in the two-factor model).

In addition, I modeled Adams Golf's daily stock price return as a function of individual major competitors in the golf industry and the Nasdaq index. These models were statistically inferior to the model I use (i.e., Nasdaq index).

In summary, since the Nasdaq index explains Adams Golf's share price movements the best, it is the model I use for my analysis.

52. Exhibit 5 illustrated the market-adjusted price changes (i.e., the portion of the stock price changes that cannot be explained by the market) and selected days during the class period that might be of interest due to either large market-adjusted price changes and/or new information about Adams Golf and its business. Only stock prices changes that are statically significant could be attributed to new unexpected material information that changed the total mix of information.
53. The regression model estimation indicates that there are three significant days during the class period at a 95% confidence interval: August, 12, 1998; September 1, 1998; and October 23, 1998. (See Exhibit 6.)
54. Two of the three days contained new and material information that was released to the public domain. Adams Golf's stock reacted rapidly to this new material information as one would expect in efficient markets:
- a) On August 12, 1998 at 10:28 AM, the following Bloomberg News article was released:

Adams Golf Inc. (ADGO US) was rated "buy" in new coverage by analyst Joseph Teklits at Ferris Baker Watts. The 12- month target price is \$ 19.00 per share.

As expected in efficient markets, the stock price reaction reacted positively to the information quickly after the press release. (See Exhibit 7.)
 - b) On October 22, 1998 at 7:10 PM, Adams Golf issued a press release. As part of its press release Adams Golf announced that (1) it expected fourth

quarter sales to be affected by weakness in the golf equipment market; (2) it anticipated fourth quarter sales to be further impacted by "the recent gray market distribution" of its products; and (3) it anticipated net income for the fourth quarter to be at or slightly above a break even level. In addition, analysts revised their 4th quarter consensus earnings estimates on October 23, 1998 from \$0.11 per share to \$0.05 per share. On October 23, 1998 within minutes of opening of trading activity, Adams Golf's stock price declined significantly, rapidly incorporating the new unexpected information. (See Exhibit 8.)

c) There was no news released on September 1, 1998 or the day before.

55. Overall I found that Adams Golf's stock was traded in a developed and efficient market. New and material information about the company and its business was impounded in the stock price rapidly after its arrival to the market place.

VII. Analysis of Potential Relevant Information and Events During The Class Period

(i) Analysis of Additional Gray Market Discussion During the Class Period

56. My conclusion that no damages resulted from the alleged omissions of the gray marketing from the Prospectus is reinforced by my analysis of additional public accounts of Adams Golf's gray marketing during the class period. On Saturday, August 1, 1998, *Golf Pro* published an article containing a reference to gray marketing at both Adams Golf and its competitors.

The company joined the ignominious ranks of the big boys in another way this year: Tight Lies started showing up in Costco, prompting a lawsuit from Adams' with two different aims. The first is to find out how the discount giant is getting the clubs. The second is to prove to its traditional retailers that Adams Golf will not sit around and take it, even if it's an '800-pound gorilla' that's dishing it out. 'We have to show we're making the effort,' Adams says.²²

57. While Adams Golf's residual stock price movement was -4.1% on August 3, 1998, this decline is not statistically significant, meaning that the decline was attributable to market movement rather than firm-specific information. This is consistent with the conclusion that the information about gray marketing was either not new or not material to the market.

58. An analyst report published by Lehman Brothers on Friday, August 28, 1998 also discussed the gray marketing of Adams Golf clubs.

One concern that we should report is that Adams Tight Lies are appearing in Costco Wholesale stores with increasing regularity. Adams has filed a suit of discovery against Costco to determine how Costco — an unauthorized retailer — has secured this inventory. One retailer in particular indicated that "Costco is flooding the market with Adams clubs at \$149" (versus an average wholesale price of \$144) — a trend that we have seen in a few markets. Although, this is an extremely serious issue that Adams is working hard to correct, we think investors should note that Costco is also selling popular clubs from Callaway and Taylor Made.²³

²² "Barney's Army," *Golf Pro*, 8/1/98.

²³ "Adams Golf, Inc.: Fore! A Golf Equipment Giant is Headed Your Way," Lehman Brothers, 8/28/98.

59. Again, this information failed to elicit a statistically significant reaction in the price of Adams Golf's stock. If the report was published before the market closed on August 28, the relevant residual stock price return was a decline of less than 1%; if published after the market closed, the residual stock price return on the next trading day (Monday, August 31) was -5.2%. Neither decline is statistically significant; therefore, I again conclude that this information about gray marketing was either not new or not material to investors.
60. I found only one additional press release in the public domain about gray marketing at Adams Golf in my study of the public information during the class period. After the close of trading on October 22, 1998, Adams Golf announced operating results for the third quarter of 1998. In addition to several other pieces of information, the press release stated that the company anticipated its fourth quarter sales to be impacted by "the recent gray market distribution" of its products.²⁴ On October 23, 1998 the price of Adams Golf's stock fell 16.2% or \$0.75. The residual decline was -14.1% and statistically significant.
61. However, it is my opinion that this decline is *not* attributable to the gray market discussion in Adams Golf's press release. My analysis of the first gray market disclosure, as well as the additional public discussions on the subject in August, has shown that gray marketing information was either not material, or had already been incorporated into the IPO offer price and was therefore not new.

²⁴ "Adams Golf Reports Third Quarter Operating Results," PR Newswire, 10/22/98, 7:10 PM.

62. Therefore, I conclude that the statistically significant decline on October 23, 1998 must be attributable instead to the other news that was added to the public mix of information at that time. In the October 22, 1998 press release, Adams Golf announced that it expected fourth quarter sales to be affected by weakness in the golf equipment market. The company also disclosed that it anticipated net income for the fourth quarter to be at or slightly above a break even level.²⁵ Furthermore, analysts revised their fourth quarter consensus earnings estimates on October 23, 1998 from \$0.11 per share to \$0.05 per share. Unlike the gray marketing discussion, this information was both new and material to the market, which explains the statistically significant drop in Adams Golf's stock price on October 23, 1998.

(ii) Analysis of Other Statistically Significant Stock Price Returns During the Class Period

63. As discussed in the Methodology section above, the movement in Adams Golf's stock price on most days during the class period can be explained largely by broad market and normal trading behavior. To analyze whether firm-specific information related to the allegations influenced the stock price over this time period, I performed an event study to determine which days had statistically significant stock price returns. The one-factor model, using the Nasdaq Index, determined that there were two significant stock price returns during the class

²⁵ "Adams Golf Reports Third Quarter Operating Results," PR Newswire, 10/22/98, 7:10 PM.

period.²⁶ The two statistically significant stock price movements occurred on August 12, 1998 and September 1, 1998.²⁷ However, both residual returns were positive; therefore they can not be associated with any losses, regardless of what news entered the total mix of public information on those days.

64. In order to make my analysis more robust, I also ran a rolling regression, in which each day's return is excluded from the model, making each day's return more likely to be significant. This model resulted in one additional day with a statistically significant return (October 2, 1998).²⁸ However, this residual stock price return was also positive. I therefore found no significant declines caused by firm-specific disclosures that could be potentially related to Plaintiffs' allegations (including those related to the alleged questionable sales practices), given that there were no significant price declines at all. Indeed, the lack of statistically significant stock price declines during the class period reinforces my conclusion that no Section 11 losses were sustained by Plaintiffs.

VIII. Other Factors that Contributed to Adams Golf's Stock Price Decline

65. Adams Golf's stock price declined for reasons completely unrelated to the alleged omissions or misrepresentations in the Prospectus. During the class period, Adams Golf's stock price declined from an IPO offer price of \$16.00 to a closing price of \$3.875 on October 23, 1998. Exhibit 9 lists some of the industry

²⁶ On the day after the class period, October 23, 1998, the stock price decline was also statistically significant; however, I already concluded that this decline was attributable to factors other than the allegations in the section above.

²⁷ Using the one-factor market model, the residual returns on 8/12/98 and 9/1/98 were 17.6% and 18.3%, respectively.

²⁸ Using the rolling one-factor market model, the residual returns on 8/12/98, 9/1/98 and 10/2/98 were 18.0%, 19.7% and 12.4%, respectively.

information released in the last half of 1998, describing the problems confronting the industry and general weakness in the market that impacted the results of several of Adams Golf's competitors.

66. For example:

On July 15, 1998, CIBC Oppenheimer released a report about Coastcast stating:

...
Management has noted that in June, the company started to see a decline in titanium clubhead orders. Moreover, it expects this to continue for the balance of the year. As many OEM manufacturers have been affected by high inventory, orders are being scaled back. As a result, we are lowering our third-quarter sales estimate from \$44.5 million to \$38 million. We have also slightly lowered our margin assumptions. These changes result in a revised third-quarter EPS estimate of \$0.36, down from our initial \$0.45 forecast. For the fourth quarter, we are lowering our revenue assumption to \$32.6 million from \$38.3 million. Our new fourth-quarter EPS estimate is \$0.31, down from \$0.38. These changes result in a new 1998 full-year EPS estimate of \$1.53, \$0.14 below our prior estimate of \$1.67.
...

On July 23, 1998, CIBC Oppenheimer released a report about Callaway Golf stating:

We are reducing our rating on Callway shares from Buy to Hold.... This is totally a function of management's newest guidance levels regarding last-half visibility.

We are lowering our 1998 EPS forecast from our previous level of \$1.50 to the range of \$0.25.... Also, our 1999 EPS forecast goes to a range of \$1.15-\$1.20 (single-point, \$1.18) from our previous \$2.00.
...

Management does not expect the competitive pressures to lift until the end of this calendar year.
...

On July 24, 1998, Jefferies & Company, Inc. released a report about Callaway Golf stating:

We have lowered our rating on Callaway Golf to Underperform from Hold and are lowering estimates to adjust for dramatically reduced expectations amidst a severe lack of visibility. Callaway is facing an over-supplied, increasingly competitive, and flattening market for golf clubs that offers little comfort in sales going forward.

On July 29, 1998 PaineWebber analyst report about Fortune Brands stated:

... The industry has been adversely affected by lower consumer demand this year, resulting in a domestic volume decline in golf clubs in the range of 5-10%....

On September 4, 1998, CIBC Oppenheimer released a report about Coastcast stating:

... As a result of our discussions, we are lowering our estimates for the third and fourth quarters of 1998, as well as for full-year 1999. Our confidence levels in these newly revised estimates is low given the continued softness in OEM demand for clubheads.

... Given the recent problems affecting golf club OEMs, we had been anticipating the need to reduce our estimates. Callaway Golf, including its Odyssey division, accounts for nearly half of Coastcast's sales. As Callaway has been hit hard by the Asian flu and competitive domestic pricing pressures, it was only a matter of time before their impact reached Coastcast.

On September 25, 1998 NationsBanc Montgomery Securities analyst report about Adams Golf stated:

While Adams' Tight Lies fairway woods still appear to be selling relatively well at retail, we believe that the effects of competition from Onlimar and Callaway will be somewhat greater than we anticipated....

On October 8, 1998 a press release at Knight-Ridder Tribune Business News: The Sun News, Myrtle Beach, S.C. stated:

From the big industry hitters such as Callaway Golf to lesser-known companies such as Englewood, Colo.'s, Black Rock Golf Co., golf stocks have tanked -- taking hits even harder than the stricken stock market.

...

On October 22, 1998, Jefferies & Company, Inc. released a report about Callaway Golf stating:

... The slowing demand for premium golf equipment combined with a significant downturn in Asian economies continues to put downward pressure on sales. ...

With competitors positioning product at more value price points, ELY will likely counter with more product introductions....

67. A regression of Adams Golf's stock price on the industry index on a monthly basis from July 1998 to June 1999 resulted in a statistically significant coefficient and a model explaining 38.9% of the stock price decline, as shown in Exhibit 10.²⁹
68. Although an industry index was ultimately not used in my event study model of daily stock price returns, Adams Golf's stock price was still influenced by

²⁹ Regressions on daily data are required for event studies that are attempting to isolate the daily effect of new information arriving in the marketplace. Regressions on data over longer periods of time may be useful in filtering out much of the "noise" in day-to-day price changes and overcomes a technical problem of non-synchronous trading of securities. The monthly regression is shown in Exhibit 15 and was conducted over the longer class period proposed by Plaintiffs but rejected by the Court. Since the revised class period contains only three months of data, I did not have a sufficient number of monthly data points to conduct a reliable statistical analysis..

industry factors. More specifically, it was strongly affected by Orlimar, one of its smaller competitors that was not publicly traded and could therefore not be included in an industry index. Orlimar was Adams Golf's closest competitor in the fairway woods product segment, as it had introduced a club much like the Adams Golf's Tight Lies in January 1998. Orlimar quickly began to take sales, or market share, away from Adams Golf. Exhibit 11 illustrates the market share increase experienced by Orlimar, which coincided with a decline in Adams Golf's market share.

69. The results of a model examining the relationship between Adams Golf's stock price and the relative share of Adams Golf to Orlimar between July 1998 and December 1999 are shown in Exhibit 12.³⁰ Because market-share data, as provided by Golf Datatech, are not publicly available for some time after the fact, lags of one and two months between the market-share data and share price were used to reflect the delay in the information reaching the market. This is similar to the way other industry-wide information reaches the market and is impounded in the prices of publicly traded competitors. Both models were statistically significant and explained over 60% of the monthly stock price of Adams Golf. This analysis demonstrates the negative effect that competition, especially from Orlimar, had on the Adams Golf's stock price. Exhibit 13 displays this point visually by charting the parallel decline in Adams Golf's relative market share and in Adams Golf's stock price.

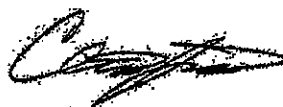
³⁰ Relative share is a concept in business strategy where a firm compares its market share to the market share of a major competitor. A relative share of three, for example, would mean that the firm has three times the market share of the competitor.

70. In other words, looking over the periods examined, 39% of Adams Golf's price decline was attributable to the problems in the industry and at least 60% of the stock price decline was related to Adams Golf's loss of market share. (Because there is some correlation between the two variables, it would not be appropriate to simply add the two effects together.)

71. Factors other than Plaintiffs' allegations—general industry decline and loss of market share—contributed to most of the decline in Adams Golf's stock price. These findings reinforce my conclusion that no losses can be attributed to the alleged omissions of gray marketing from the Prospectus.

IX. Conclusions

72. In my opinion, there are no damages from the offering attributable to Plaintiffs' allegations associated with the gray marketing and sales practice risks because there are no material price declines that can be causally linked to these allegations.



Christopher M. James

7/14/06
Date